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The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
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Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MOTOSHI MIZOGUCHI,
MASAHIKO ITO and MIKI YONEHARA

Appeal No. 1997-0811
Application 08/240,554¹

ON BRIEF

Before MARTIN, JERRY SMITH and BARRY, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

¹Application for patent filed May 11, 1994.

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This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1-4 and 6-18, which constitute all the claims remaining in the application. An amendment after final rejection was filed on August 17, 1995 and was entered by the examiner.

The disclosed invention pertains to a spectacle type display device. Such devices are worn on the head. The device combines two image sources and two optical units to focus the image sources on the left and right eyes of a wearer.

Representative claim 1 is reproduced as follows:

1. A spectacle type display device substantially enclosed in a housing and arranged to transmit images generated by a pair of image sources along a double folded optical path by way of a pair of image transfer units, each of which includes a reflection plate and an ocular lens, and a reflecting means positioned to receive images from the image transfer units and to project the images on retinas of the left and right eyes of a wearer, and which comprises:

a first support and linkage means for supporting and linking said pair of image transfer units so as to be laterally moveable toward and away from each other, said first support means including a rail on which said image transfer units are slidably supported, and

second support means for supporting said pair of image sources for lateral movement toward and away from each

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other and cojointly for movement in a fore-and-aft direction relative to the reflection plates and the ocular lenses of said image transfer means.

The examiner relies on the following references:

Heilig	2,955,156	Oct. 04, 1960
Schoolman	4,559,555	Dec. 17, 1985
Trumbull et al. (Trumbull)	5,124,840	June 23, 1992
Lee	5,125,733	June 30, 1992
Henkes et al. (Henkes)	WO 91/04508	Apr. 04, 1991
Suwa et al. (Suwa)	0 438 362	July 24, 1991
(European application)		

Lindsay, Physical Mechanics, 3RD Edition, 1961 by D. Van Nostrand Company, Inc., pages 39, 40, 411 and 412.

The following rejections have been made against the claims:

1. Claims 1-3, 5-7, 9-12, 17 and 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Schoolman and Heilig.

2. Claims 4 and 8 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Schoolman and Heilig and further in view of Suwa.

3. Claim 13 stands rejected under 35 U.S.C. § 103 as

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being unpatentable over the teachings of Schoolman and Heilig and further in view of Henkes.

4. Claim 14 stands rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Schoolman and Heilig and further in view of Lee.

5. Claims 15 and 16 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Schoolman and Heilig and further in view of Lindsay and Trumbull.

Rather than repeat the arguments of appellants or the examiner, we make reference to the briefs and the answers for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answers.

It is our view, after consideration of the record

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before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 1-4 and 6-18. Accordingly, we reverse.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine,

837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1,

17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S.

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825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

We consider first the rejection of claims 1-3, 5-7, 9-12, 17 and 18 as unpatentable over Schoolman in view of Heilig. With respect to independent claim 1, the examiner asserts that Heilig

essentially teaches the claimed invention except for the recitation of a reflection plate in the image transfer units. The examiner cites Schoolman as teaching the use of reflection plates in a head mounted stereoscopic display. The examiner concludes that it would have been obvious to the artisan to add Schoolman's reflecting plate to the Heilig device [answer, pages 3-4].

Appellants point to several features of independent

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claim 1 which they allege are not taught or suggested by the combination of Heilig and Schoolman. Among these features are the means for supporting and linking the pair of image transfer units, the means for supporting the pair of image sources for movement cojointly with the image transfer units, and an additional reflection means positioned to receive images from the reflection plate and ocular lens of the image transfer units [brief, pages 13-16]. The examiner disagrees with each of appellants' observations.

We agree with the position of appellants and essentially concur with each of the arguments made by them in the briefs. While the examiner has found some similarities between the claimed invention and the teachings of Heilig and Schoolman, the examiner has essentially ignored specific details of the

invention recited in claim 1 which are argued by appellants as demonstrating nonobviousness. We agree with appellants that a single means in Heilig does not provide support and linkage functions for the image transfer units. Although Heilig teaches that the image transfer units and the image sources

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are each movable in two dimensions, the examiner has offered no cogent reason as to why it would have been obvious to move the image sources conjointly with the reflection plates and ocular lenses of the image transfer units. Heilig specifically desires independent movement of the optical and television units

[column 1, lines 32-36]. Also, the examiner never has addressed the separate reflecting means of claim 1 which is connected to the image transfer units.

Since there are several differences between the invention of claim 1 and the teachings of Heilig and Schoolman which have not been properly addressed by the examiner, we find that the examiner has failed to establish a prima facie case of the obviousness of claim 1. Therefore, we do not sustain the rejection of independent claim 1 based on Heilig and Schoolman. Since claims 2-4, 17 and 18 depend from independent claim 1, we also do not sustain the same rejection with respect to these dependent claims.

With respect to independent claim 6, the examiner reiterates the position discussed above, and additionally

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notes that the applied prior art does not disclose the claimed cam and link mechanism. The examiner asserts that the claimed cam and link mechanism would have been an obvious design choice over the screw mechanism taught by Heilig.

Appellants point to several features of independent claim 6 which they allege are not taught or suggested by the combination of Heilig and Schoolman. Among these features are the first operation means and the first slide means which includes a cam and a link [brief, page 16]. Appellants argue that the examiner's bare assertion that something is a design choice is insufficient to establish obviousness within the meaning of 35 U.S.C. § 103. The examiner simply reiterates the obviousness of the design choice.

We again agree with the position taken by appellants. In addition to points discussed above with respect to claim 1 which are also relevant to claim 6, we also agree with appellants that the examiner has not provided a factual record to support the position that a cam and link mechanism as recited in claim 6 would have been obvious to the artisan in view of the applied prior art. The fact that cam and link mechanisms were known in

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the art does not automatically render such mechanisms obvious when combined with the other elements of claim 6.

Since the factual record does not support the obviousness of independent claim 6 within the meaning of 35 U.S.C. § 103, we do not sustain the rejection of claim 6 based on Heilig and Schoolman. Since claim 7 depends from independent claim 6, we also do not sustain the same rejection with respect to this dependent claim.

With respect to independent claims 9 and 11, the examiner relies on positions previously discussed. Appellants point to several features of independent claims 9 and 11 which they allege are not taught or suggested by the combination of Heilig and Schoolman. We again agree with the position of appellants for basically the same reasons we have discussed above. The record does not support the examiner's conclusion of obviousness within the meaning of 35 U.S.C. § 103. Therefore, we do not sustain the rejection of independent claims 9 or 11 based on Heilig and Schoolman. Since claims 10, 12 and 13 depend from independent claims 9 or 11, we also do not sustain the same rejection with respect to these dependent claims.

Dependent claims 4 and 8 stand rejected on the teachings of Schoolman and Heilig and further in view of Suwa. Dependent claim 13 stands rejected on the teachings of Schoolman and Heilig and further in view of Henkes. Since neither Suwa nor Henkes overcomes the deficiencies noted above in the basic combination of Schoolman and Heilig, we do not sustain the rejection of these dependent claims as formulated by the examiner.

We now consider the rejection of claim 14 as unpatentable over Schoolman and Heilig and further in view of Suwa and Lee. Many of the examiner's positions have been considered above. The examiner also asserts that the claimed recitation of simultaneous movement and synchronous movement would have been obvious in view of Lee's teaching of moving lenses simultaneously in two orthogonal directions. Appellants argue that claim 14 recites that the image sources are simultaneously movable in two orthogonal directions. According to appellants, Lee's image sources are fixed and only the lenses or image transfer units are movable

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simultaneously. Therefore, appellants argue that Lee does not suggest moving image sources in response to lateral movement of the lenses [brief, pages 28-29]. The examiner notes that Heilig's knobs could be turned in a manner to achieve simultaneous movement of image sources and image transfer units.

We agree with appellants that the overall relationships between the mirrors, lenses and adjustment means of claim 14, and the synchronous and simultaneous movements specifically recited in claim 14 are not suggested by the collective teachings of the applied prior art. The examiner has sought to pick and choose elements of the claim from diverse teachings which do not suggest their combination. Additionally, we agree with appellants that even if the artisan combined the teachings of the applied prior art, the specific relationships recited in claim 14 would not result. Therefore, we do not sustain the rejection of claim 14 as formulated by the examiner.

Finally, we consider the rejection of claims 15 and 16 as unpatentable over Schoolman, Heilig, Lindsay and Trumbull.

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These claims recite features which have been considered above. The examiner adds the teachings of Trumbull to suggest the obviousness of separate left and right image units. Appellants argue that the collective teachings of the applied prior art do not suggest the simultaneous movement of image sources in a lateral and longitudinal direction nor the claimed relationships between the image sources and the image transfer units which result from the claimed movement [brief, pages 29-30].

We agree with appellants' arguments for the same reasons which we have discussed above. Therefore, we do not sustain the examiner's rejection of claims 15 and 16.

In summary, we have not sustained any of the examiner's rejections of the claims under 35 U.S.C. § 103. Therefore, the decision of the examiner rejecting claims 1-4 and 6-18 is reversed.

REVERSED

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